Interagency Development Team
Meeting Summary
October 28, 1997

Alternative 3 Discussion

USF&W Alternative
USF&W presented their Alternative as a starting point for discussion of Alternative 3.
The main physical features of the Alternative were:
- A fully isolated system, with no pimping in the south Delta except for emergencies.
- Multiple screened diversions on the Sacramento River near Hood and Freeport into an isolated facility to Clifton Court Forebay (CCF). Capacity of the isolated facility around 10,000 cfs. (Have not determined optimum size yet)
- Facilities to provide water out of the isolated facility to the diverters along it's route.
- A screened intake (approximately 3,000 cfs) on the San Joaquin River with an isolated facility to CCF.
- In-Delta storage facilities directly connect to the Sacramento River Isolated Facility. (May be similar to that considered in IDT Alternative 1)
- Intertie of south Delta State and Federal Water Project.
- 250 TAF of groundwater storage in the Sacramento Basin and 500 TAF in the San Joaquin Basin.
- 400 TAF of south of Delta Storage in Dominigoni.
- Operable Barrier at the head end of Old River. (Not sure if needed with this alternative)
- Cross channel would be closed all year round.

Some of the advantages discussed for this type of approach:
- Would eliminate south Delta Diversions.
- Could allow much more ERPP habitat in the South Delta.
- Would allow flexibility to reduce fish entrainment with multiple diversions with "best feasible technology screens " and using real time monitoring.
- Could use in-Delta storage to allow periodic shut down of diversions.
- Could allow the pumping pattern to be less varied and more uniform in nature. Would have less variation in diversion amounts which would result in less man made variation in the in-Delta circulation. i.e Delta smelt as well as other species respond will to nature spikes in hydrology but not man made spikes created by pumping variation. (IDT members not sure if this a positive or negative for fisheries).
- Return flow water quality from in-Delta Ag served from the isolated facility would improve. Would give greater assurances for good water quality Ag.
- Multiple diversions would allow smaller diversion that may not require bypasses. (May not need bypass up to 3,000 cfs).
- May improve salt balance in San Joaquin system.

Some of the possible disadvantage discussed were:
- Would reduce the amount of water supply benefits.
- An entirely isolated facility may violate stated principles of CALFED.
- May reduce in-Delta water quality, especially the south Delta.
- Eliminates some flexibility to manage for fisheries and in-Delta water quality.

San Joaquin Diversion
Given that 1) there is a limited amount of water that can be diverted out of the San Joaquin (Around 231 TAF per year averaged over a 73 year record, which is not new water but a shift in location of diversion) 2) That the diversion and isolated conveyance is expensive (around $446 Million) 3) The Sacramento River would have excess water any time the San Joaquin River could divert. The IDP decided that its better to increase the diversion and isolated conveyance capacity to the Sacramento River to achieve the benefits of reduced entrainment and increased water supply reliability.

Service from the Isolated Facility
Would the Isolated facility supply, by direct connection, the local Diverters along its route? The IDT supported the idea. Given theat the peak total peak flow to these diversions is around 2,200 cfs. Would have to know the costs and benefits for the different areas served before could say definitely how much. Major benefits include 1) more of an assurance for good water quality for in-Delta Ag 2) consolidation and reduction of unscreened diversions.

IDT support a operation policy that would eliminate south Delta pumping except for emergencies (i.e. fully isolated?)
IDT though they could include the alternative as a range to consider. But would need some guidance from Lester on past CALFED comments in Phase I, as this violates the Dual concept of alternative 3 Considering:
- Water Quality needed for in-Delta Ag
- Assurances needed for stakeholder groups
- Contra Costa Water District water Quality

Straw man Operations for Alternative 3
The IDT agreed that there should be a model run that tests a 10,00 cfs isolated facility, using a operational criteria that different from existing standards for the diversion E/I ratio.

Straw man operations suggested by P.C.
Purpose is to minimize diversions from the south Delta year round, especially in the spring critical periods.

Maximize the diversions from the Sacramento River

Sacramento River Constraints
1) Meet outflow criteria
2) Short term curtailments to protect Smelt and Striped Bass. (36 days with no more than 1 out of

2 days)
3) Minimum flows below diversion point such that there is no reverse flows on the screens, especially during periods when Salmon are present at the screens. (around 7,000 cfs)

South Delta Pumping Constrains
1) South Delta pumps minimum 1,000 cfs, except in March thru June when there would be no pumping.
2) Maximum pumping would follow the present E/I ratio, where the "I" is the San Joaquin R. This is to protect the San Joaquin Salmon Run.

General Goals for Alternative 3
- Meet south Delta water Quality Standards
- Give Ag access to good quality water.
- Meet Export water quality Standards.
- Improve the existing water supply reliability.
- Minimize entrainment

IDT agreed on following Operational criteria for Alternative 3 with a 10,000 cfs I.F.

- No restraint on south Delta minimum pumping.
- E/I Ratio:
  -During the time when there is no pimping in the south Delta, there is no E/I Ratio applied to the diversion on the Sacramento River.
  -During periods when there is pumping in the south Delta, The "E" includes both the Sacramento and south Delta diversions and the "I" includes the Sacramento and San Joaquin Rivers.(i.e. the 35/65 split)
- The would be no pumping from the south Delta during the Critical periods (March thru June and October) unless the San Joaquin exceeds 15,000 cfs or Delta Outflow exceeds 50,000 cfs.
- No diversion on the Sacramento River during the Month of May.
- Always take water out of Sacramento River first up to 10,000 cfs, then turn on south Delta pumps.

Straw man Model Run
10,000 cfs Isolated with above operational criteria. Pumping in south Delta.
Storage:
Ground Water: 250 TAF Sacramento Valley, 500 San Joaquin Valley
Sacramento Rive Tributaries: 3.0 MAF
San Joaquin River Tributaries: 0
In-Delta: 0
Off Aqueduct: 2:0 MAF

Informational Needs:
- Need run from DWRSIM and DSM to determine what the minimum pumping from south Delta is needed to maintain water quality.

- Need costs to serve different areas from an I.F.